(a) Promote a Professorial Chair of Sports Medicine at a Medical School. A target of £3m may be required, some of which might be raised from industry and some from Government sources, provided sufficient impact was made; all Members of Parliament to be contacted by their personal general practitioner and in the same way others who might be in a position to be influenced, Captains of Industry, Chairman of Health Boards, and all organisations connected with Sport.

The aim of a Professorial Unit should be a flow of trained personnel in the medical aspects of sport whether doctors, physiotherapists or coaches.

- (b) The news media should be pressurised at all levels to emphasise the need for sport and sports medicine facilities and necessary training of personnel to be involved.
- (c) The old Public Health Department and Schools Medical Services, which, with reorganisation of Medical Services, are now part of Community Medical Services, should be advised to consider expansion into the Sports Medical Services field. The Schools Community Health Service physicians examine childrens' eyesight and look for hip-joint disease and arrange inoculation programmes and there is a case for expansion of their role and this would involve special training for Community Physicians. The Community Physicians' Committee of the BMA should be invited to discuss the problem.
- (d) Increasing contact and inter-relationship with the Health Education Unit with a view to increasing the range and activity of both bodies and particularly with a view to increasing the budgets.
- (e) BASM should set up a panel of experts available to give advice at local level to organisations connected with all manner of sports, for example, the manager and the Union of a local factory who wish to set up a football team; a Rugby Club who feel that some form of first aid room be set up at their Club House.
- (f) Eventual premises and staffing on a full-time basis. 1% of the budget of the NHS would not be unreasonable to ask for and this would result in the apparently staggering sum of £65m per annum available to Sports Medicine in terms of 1978 NHS expenditure.

## **CORRESPONDENCE**

From Pedro Paulo de Oliveira Professor of Physical Education, University of Recife Appt'o 301 Boa Viagem, Av. Conselheiro Aguiar 1515, RECIFE 50,000, Brazil.

To the Editor January 22nd, 1979

Dear Sir.

## **SPORTING LONGEVITY**

Nowadays exercise, and the practice of sport, are the greatest resources for prolonging the lifetime of the human being. In a modern programme of exercises, care in breathing correctly and increasing the capacity of oxygen absorption take us through a controlled effort, to the acquisition of stronger lungs and heart, lessening heart rate. The reduction of the heart rate and the hypertrophy of the myocardium, propitiate a bigger demand of blood supply to the muscles, increasing local capillarity and bringing nutrition.

With the growth of oxygen absorption, we improve the capacity of the cells to nourish themselves, mobilizing greater resources of energy, and giving better physical endurance. This brings us to believe that all these factors contribute to the lengthening of the life-span of human beings.

It is a fact that the better athletes in various sports have only a short period of participation. The records give clear proof of the preoccupation of trainers with better training techniques, in search of better athletic performance, without the slightest worry about the biological condition of their athletes.

In an excellent documentary of the Olympic Games, I saw an interview of an athlete from the Soviet Union who talked about his great surprise and disappointment with the short duration of the sporting activity of the Olympic participants. How can we admit in the era of the science of sports this unforgiveable lack of care for the physical longevity of the sportsmen? Is it possible that our knowledge about the physiology of effort serves only to illustrate our scientific papers? It is a pity that we put victory above the physical wholeness of our athletes in a flagrant disrespect for the preservation of their health. We must never permit a thing like this to happen nowadays; the availability of modern equipment in efficient human performance laboratories studying the physiology of effort, and the technical processes of pulse evaluation done on the spot in the competition sites, offer an excellent basis for the correct guidance of our task. The modern techniques of the physiology of effort show with reasonable precision that the harmony of the heartbeats of the athlete with his training, is the big secret for his sporting longevity.

We should however take into consideration his biological individuality; because during training, the best physical endurance of one athlete generally does not coincide with that of another. That is why the principle of biological individualization is a very important factor to the work done. The necessity of checking the pulse during training, the simplicity of the method, taking into account the self-evaluation by the athlete himself, motivates the interest of knowing the progressive results of his own physical endurance. This information so simply acquired can make the athlete feel a greater self motivation by its constant use, and to not complicate the trainer's task.

For instance: if an athlete has 60 beats per minute while resting, we should raise this to 180 bpm, next decrease it to 120 bpm and raise it again to 180 bpm, and so on. One can consider that the heart muscle works in the best way when it beats two or three times faster than during rest. This is the correct formula for the solution of this problem; as the training consists of diminishing heart frequency, thus supplying a better organic performance, and considerably increasing the sporting lifetime of the athlete.

Now if we have these resources offered by modern sports science, how can we understand the present limitation of the activity of the Olympic athlete, without accepting the lack of care for his biological condition, in a criminal preference for a work of unlimited intensity that can lead him to make the records? Could this be the only way? Frankly I don't think so. If we have the resources, scientifically proven, for prolonging the sporting career of athletes, we should put them into practice as soon as possible, in order to preserve the human species from the inconsequent attitude of disrespect for the fellowmen in search of his personal self-assertion.

Yours faithfully,

P. P. A. de OLIVEIRA

Some of the material in this letter was presented and discussed at the XXI World Congress of Sports Medicine in Brazilia in September 1978, and raises the points that are of interest to doctors interested in sport in this country as well

Editor

## **CORRESPONDENCE**

The Sports Council, 70 Brompton Road, London SW3 1EX

To the Editor:

Dear Sir,

## COUNCIL OF EUROPE REGISTER OF SPORTS RESEARCH

The Sports Council is administering the UK part of the Council of Europe exercise to produce the second register of sports research. In this connection, I should be very grateful if you would ask members of the BASM to contact me if they have been involved in any research projects which started at any time since 1 January, 1977 so that I may obtain the details required by the Council of Europe..

Thank you very much for your help.

Yours faithfully, G. ARROWSMITH Research Officer